

Lead Center Accomplishments during this past year

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Center/NOAA



Contacting Countries

- Hosted Lead Center Coordination meeting
 - 28-30 September 2005
 - Howard Diamond, Dick Thigpen, Matt Menne, etc. from NCDC
 - JMA, Australia, etc.
 - Divided up the world
- Sought real time GSN data
- Sought historical GSN data
- Sought historical GUAN metadata

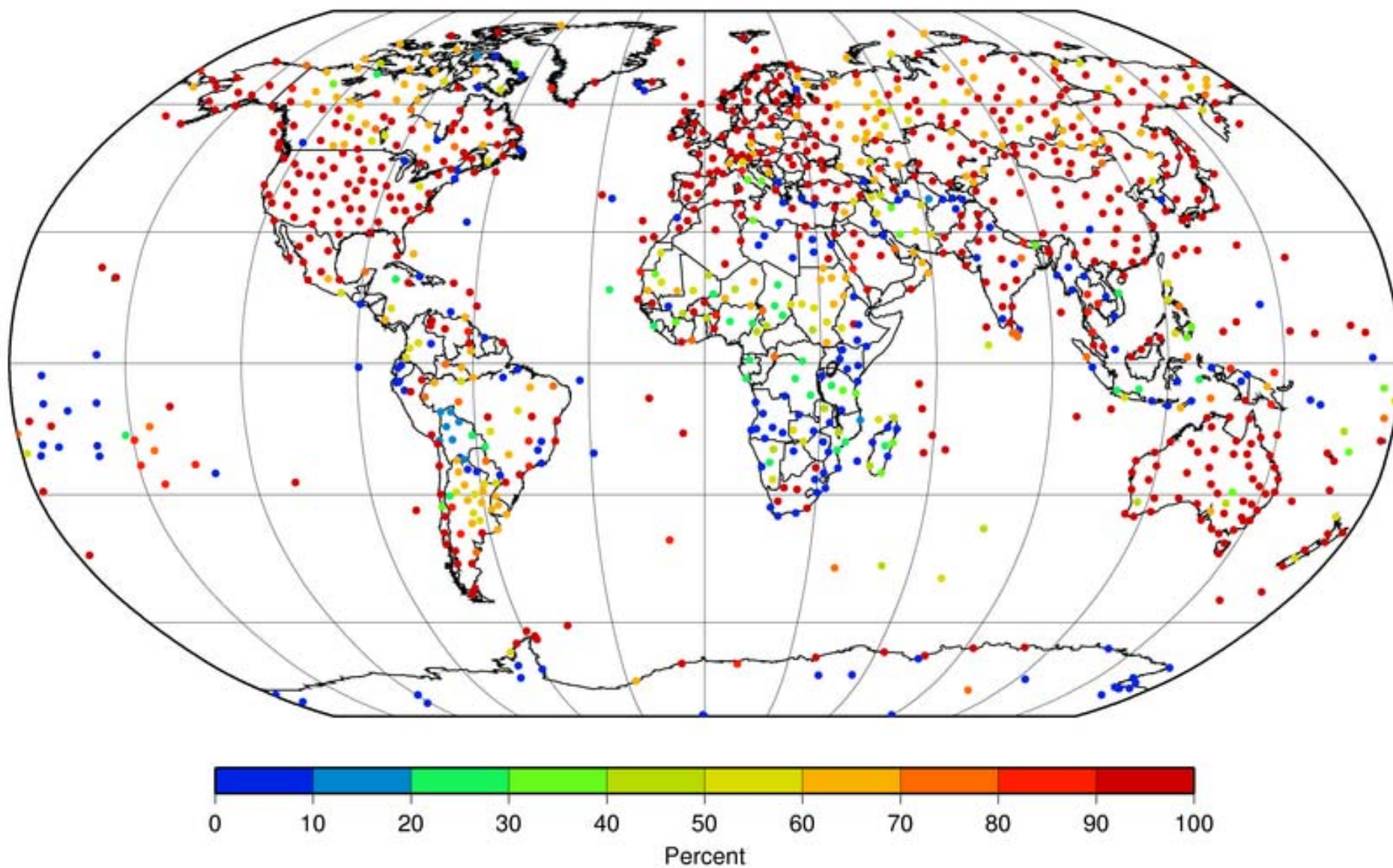


Larry Nicodemus

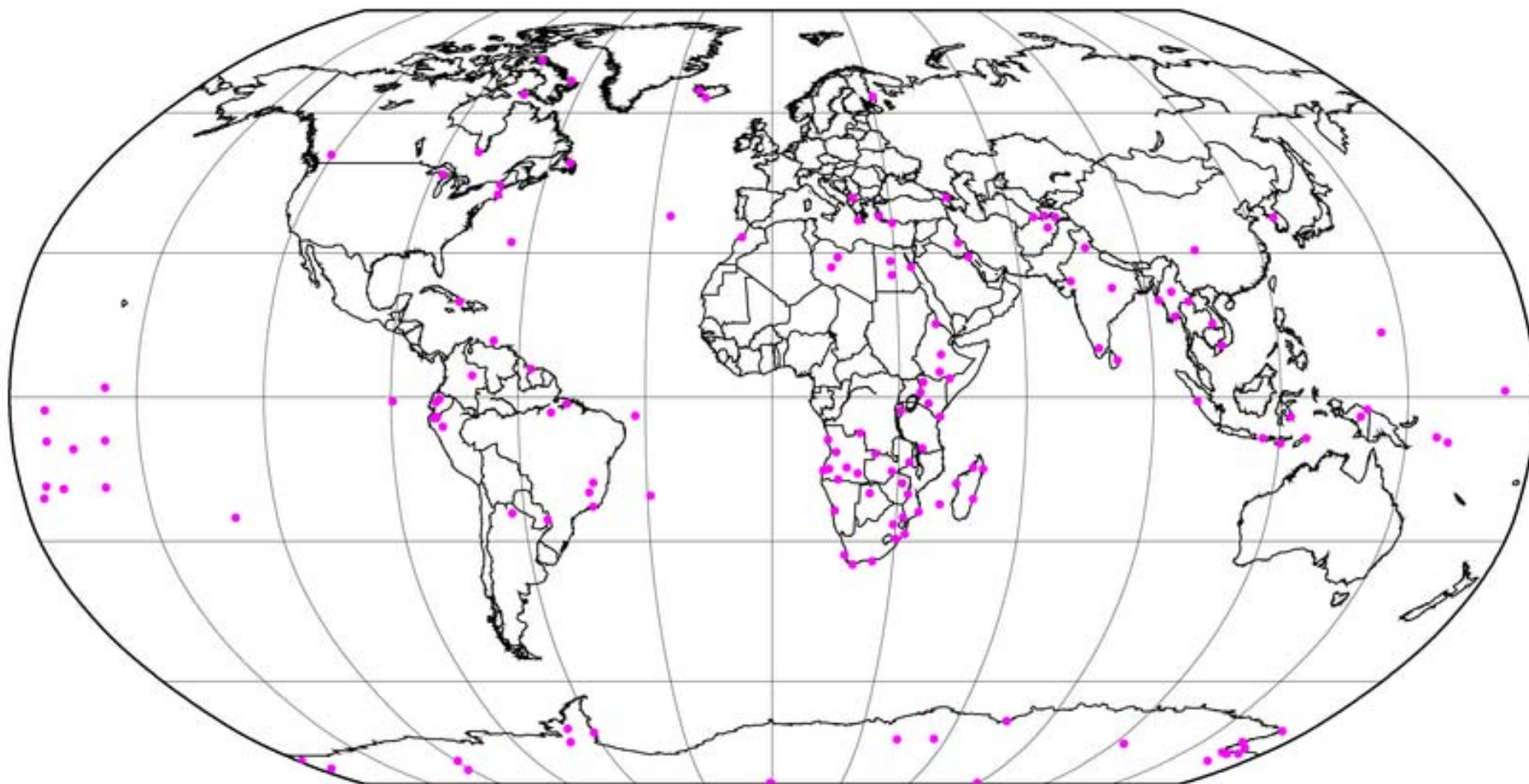
- Assembled several inventories and name lists and placed them into a Microsoft Access database for query development
 - GCOS inventory
 - GUAN inventory
 - GSOD inventory (Detailed daily inventory)
 - Station meta data lists (GCOS, GUAN, GHCN, GSOD, ISH)
- Has started contacting countries about current CLIMAT messages
- No performance figures as this has just started
 - But three figures showing the state of recent GSN transmissions



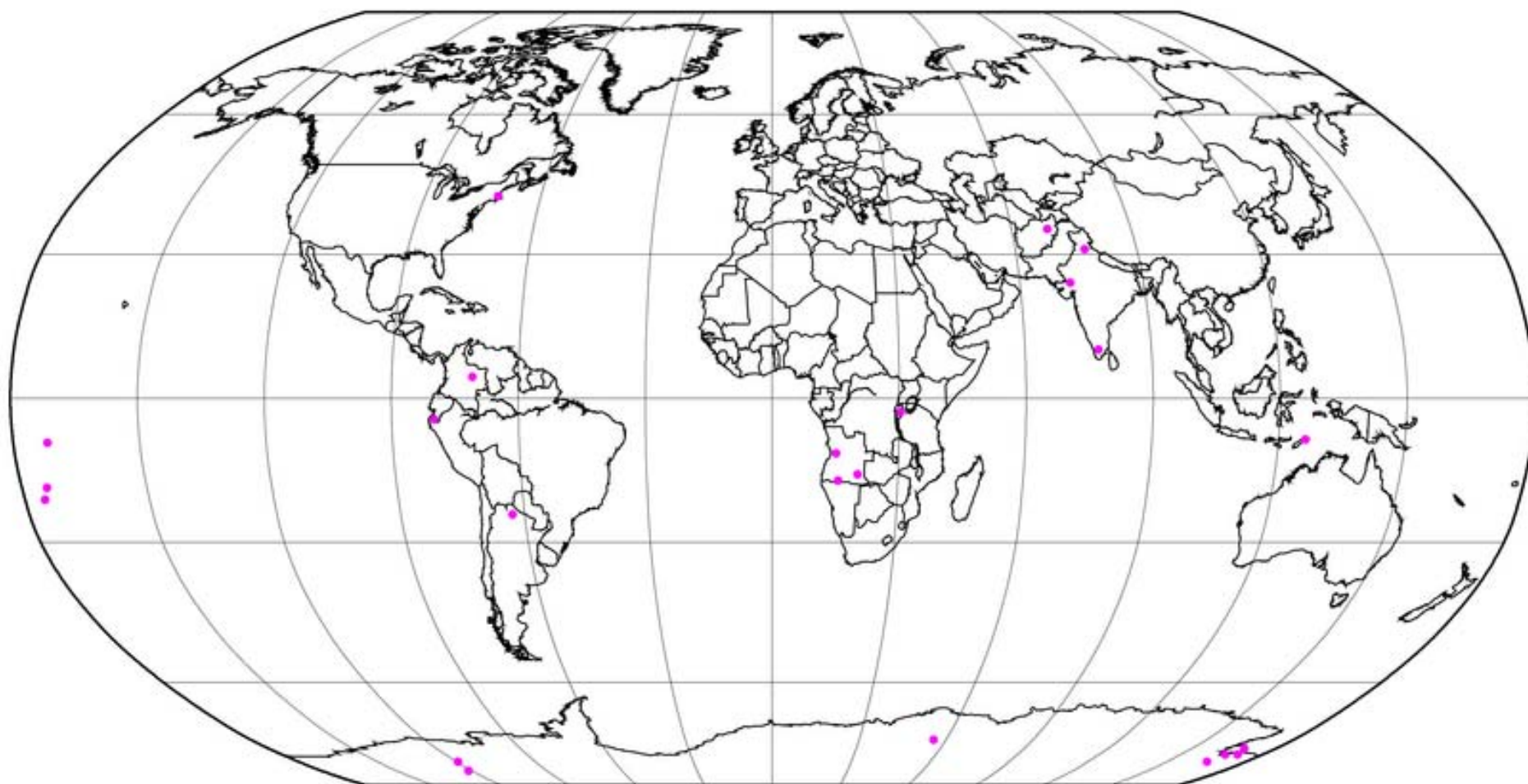
Percent of CLIMAT Reports March 2005 - Feb. 2006



GSN Stations Transmitting No CLIMAT Messages March 2005 - Feb. 2006



Silent GSN Stations - No Reports over the GTS Mar. 05 - Feb. 06



GSN CLIMAT Reports

- The good news is that very few (23) GSN do not transmit something over the GTS
- But 144 do not transmit CLIMAT reports
- Less than half, 440, transmit CLIMAT messages every month
- Larry will work at improving this during the next year



Greg Hammer

- Sought historical daily GSN data from 38 countries
- 11 countries responded with data
 - The gold star goes to Belarus as they supplied daily precipitation data back to 1881
 - 5 additional countries provided updates to their archived GSN data














Additional Activities

- Had a poster on GSN presented at the Technical Conference prior to the Commission for Climatology Meeting
- Received some photographic metadata
 - Which are being loaded into GOSIC
 - Only 16 out of 1000 stations have photographic metadata available
 - But at least it is a home for the metadata when photographs become available





WMO Region	Country	Station	Station Number	Link to MI3	Pictures
II	Nepal	Katmandu Airport	44454		
IV	Bahamas	Nassau Airport New Providence	78073		
	Barbados	Grantley Adams	78954		
	Cayman Islands	Owen Roberts Airport Grand Cayman	78384		
	Colombia	San Andres Island/Sesquicentenario	80001		
	Costa Rica	Puerto Limon	78767		
	El Salvador	Acajutla	78650		
	Jamaica	Montego Bay/Sangster	78388		
	Mexico	Chihuahua	76225		
		Guanajuato	76577		
		La Paz, BCS	76405		
		Manzanillo, Col.	76654		
		Mazatlan	76458		
		Aerop. Internacional Merida, Yuc.	76644		

GSN station # 76458 - WMO Region IV

Mazatlan, Mexico

August 2005



Easter Border of Observatory



Evaporation Pan



Inflation Building



Instrument Field Looking East



Instrument Field Looking West



Instrument Field Oriented East



Instrument Field



Instrument Shelter



Looking North

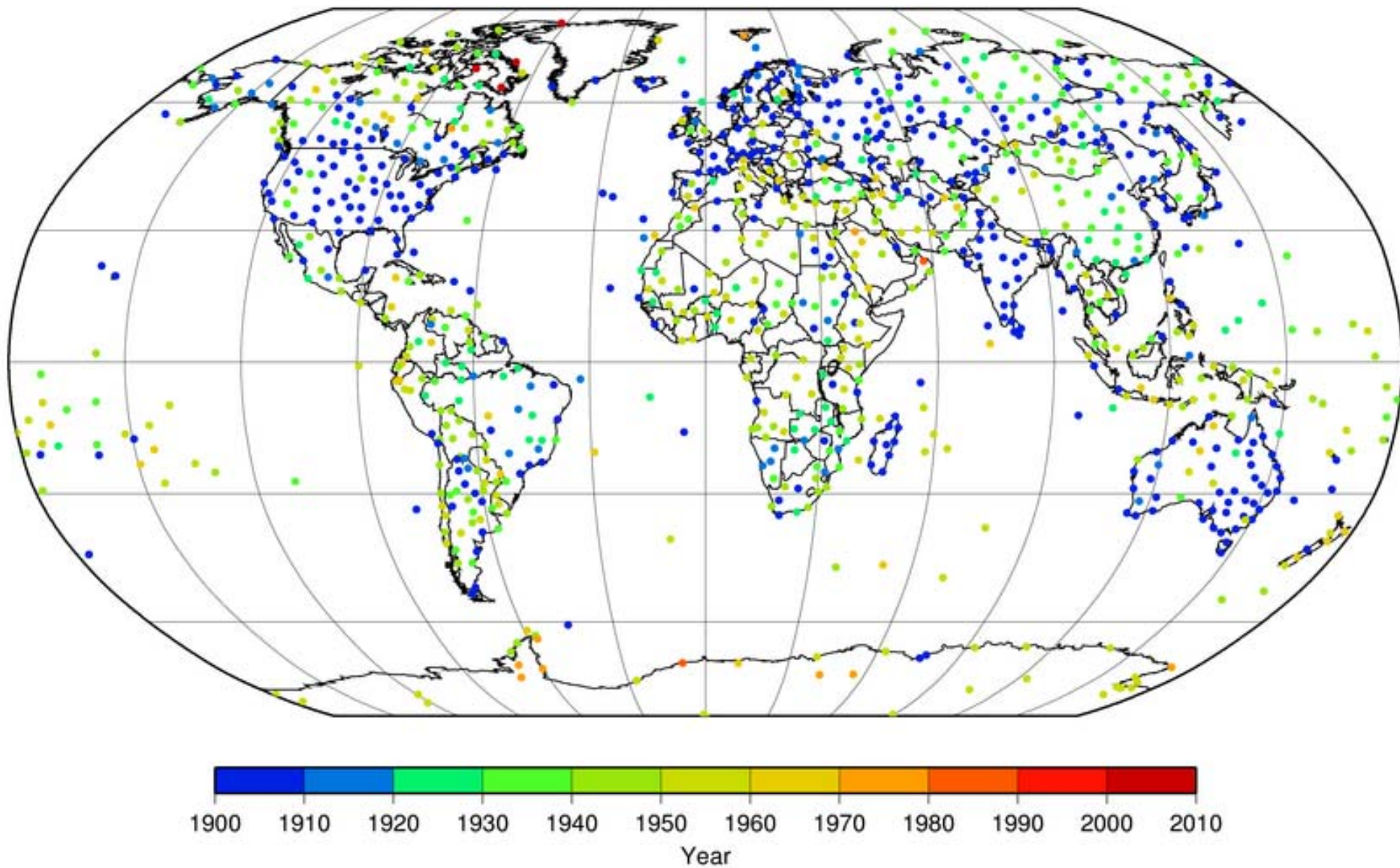




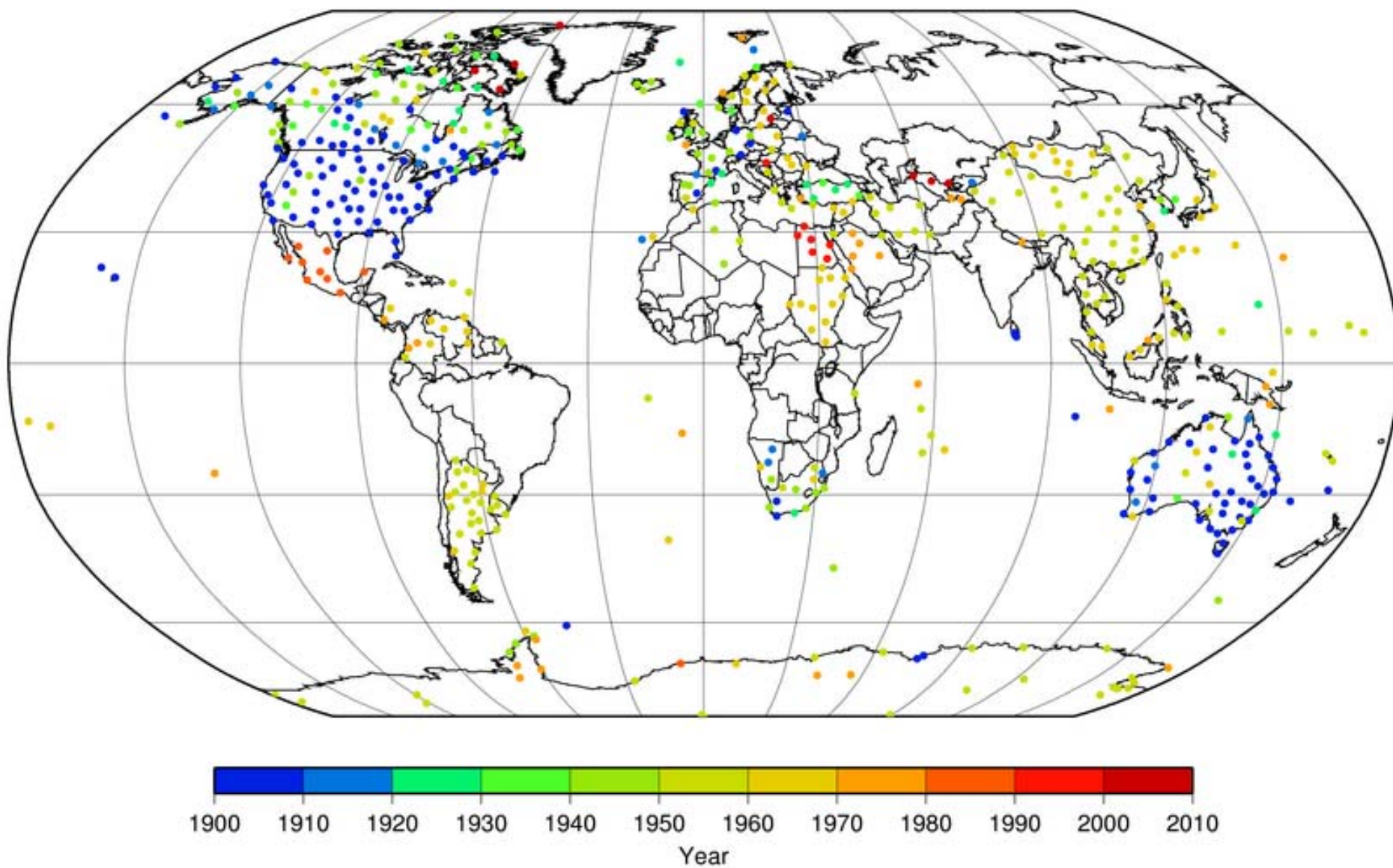
Status of the GSN Archive



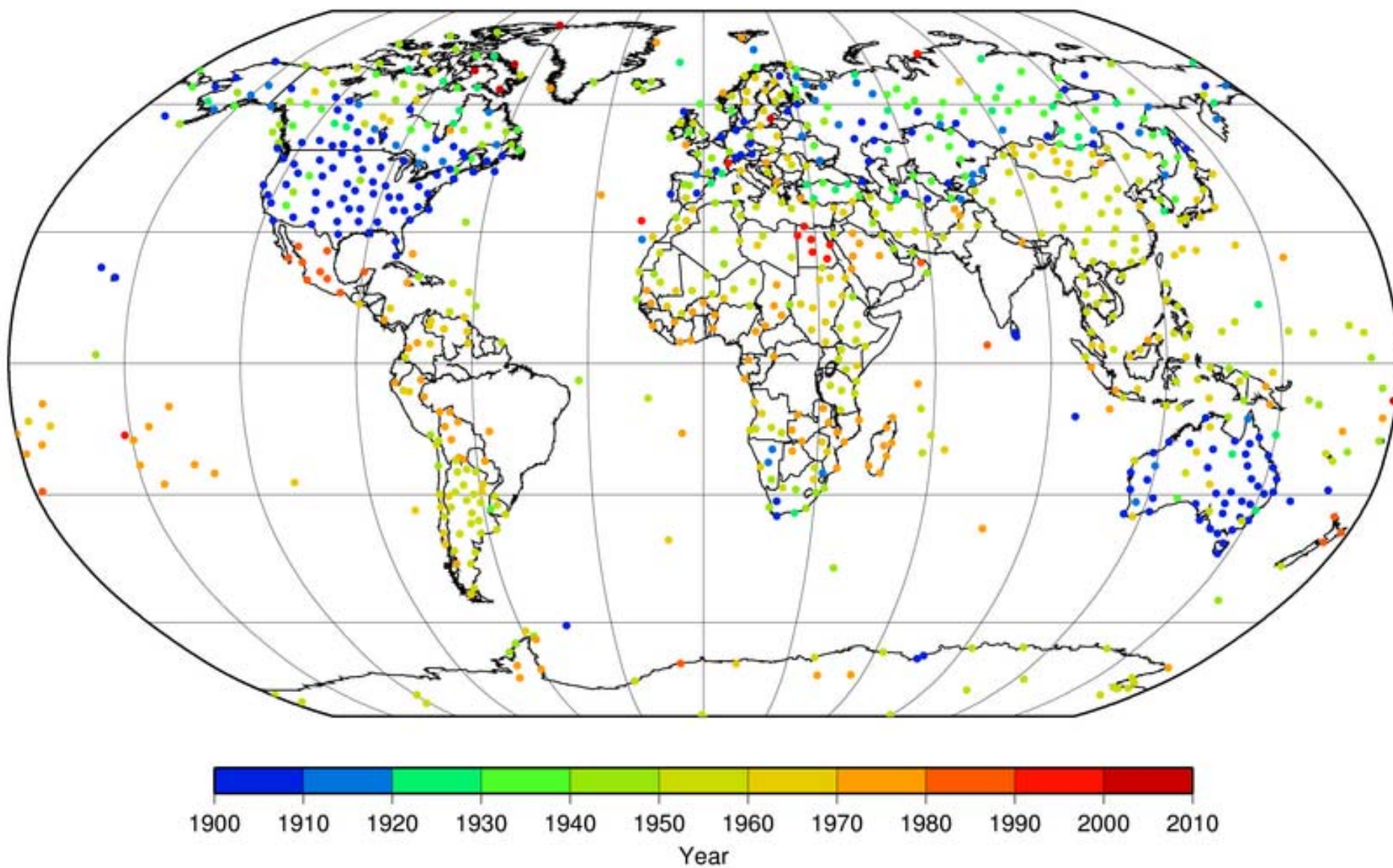
Estimated Start Year for GSN Stations



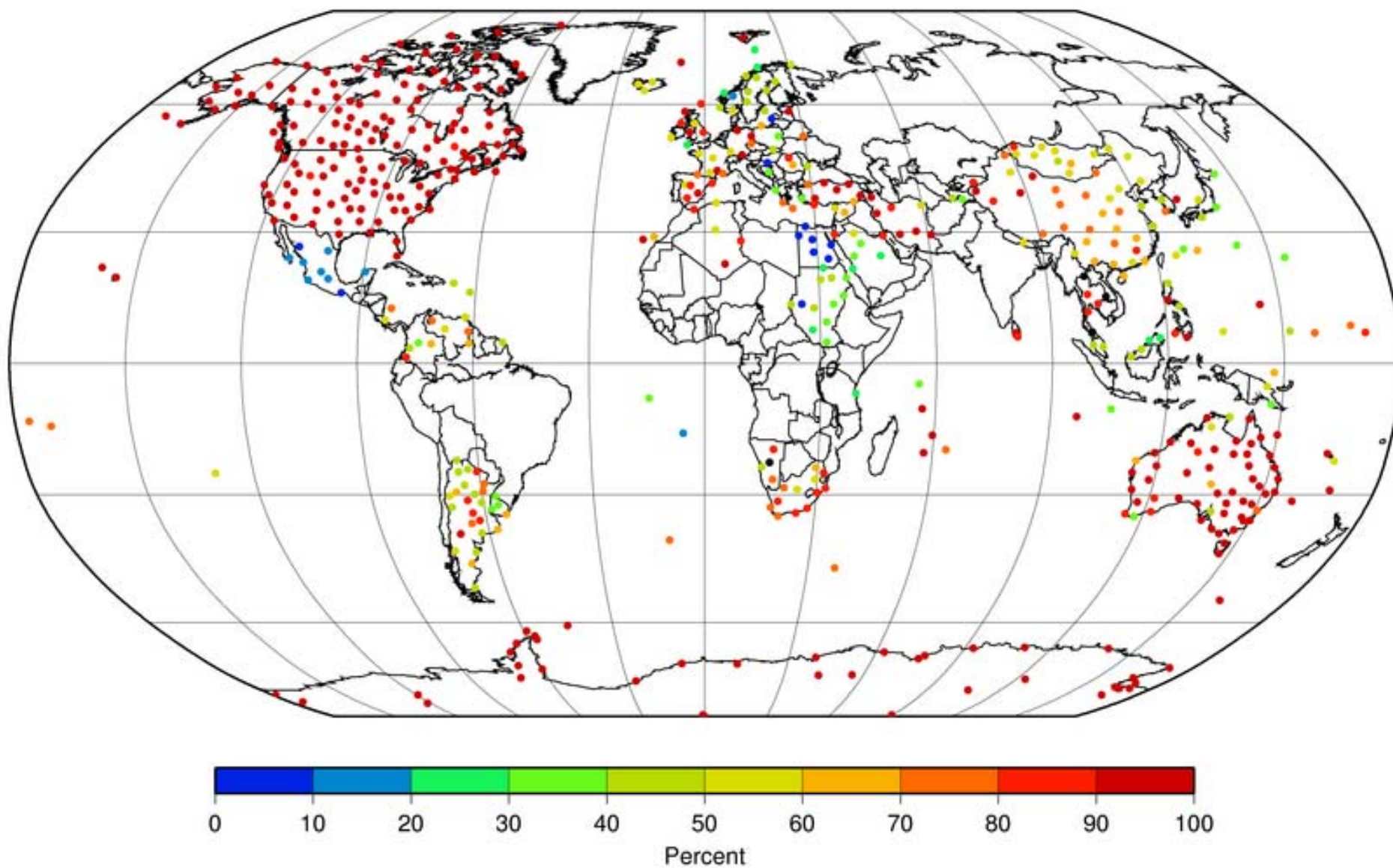
Start Year for Daily Data in the GSN Archive



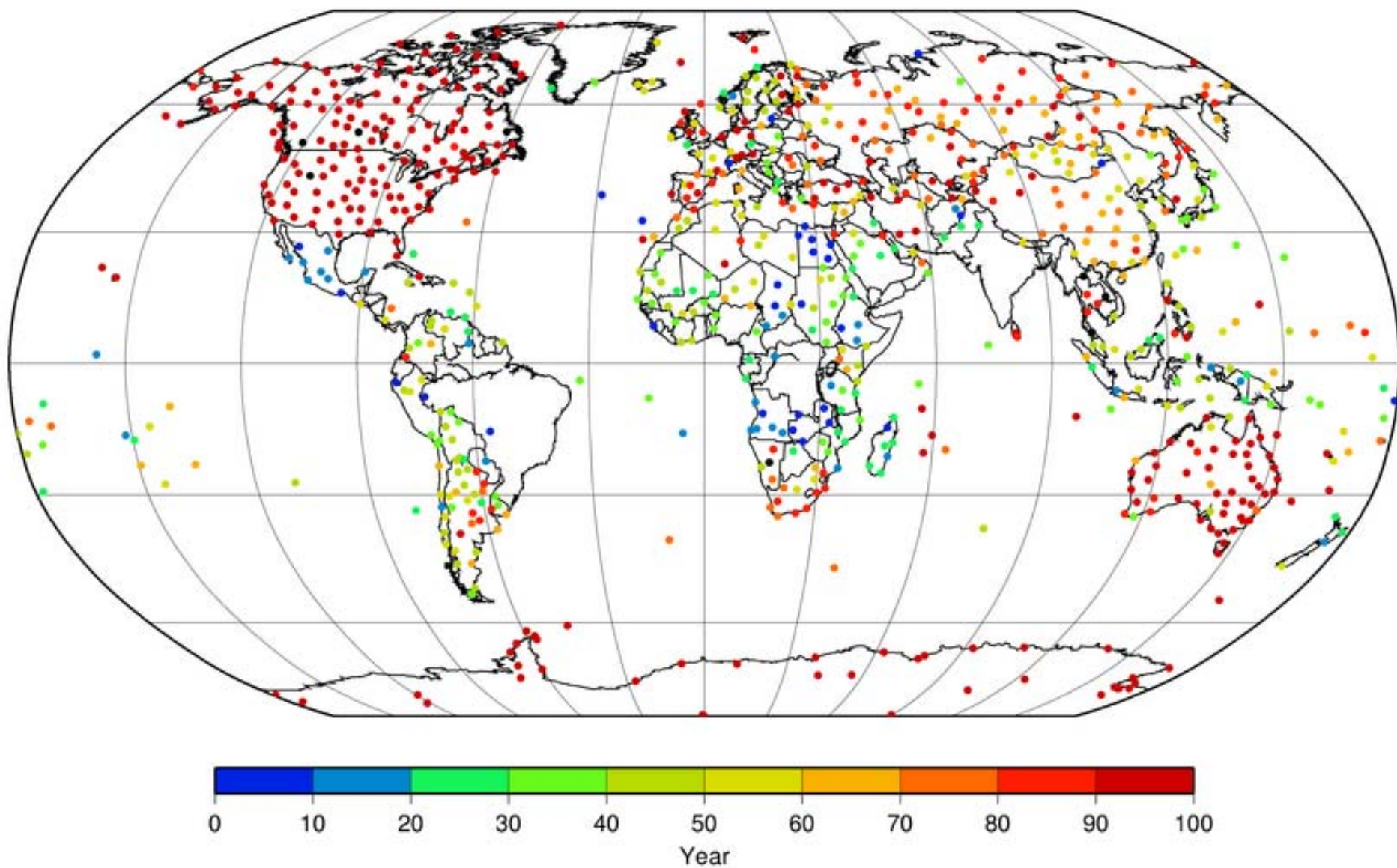
Start Year for Daily Data in GHCN Daily



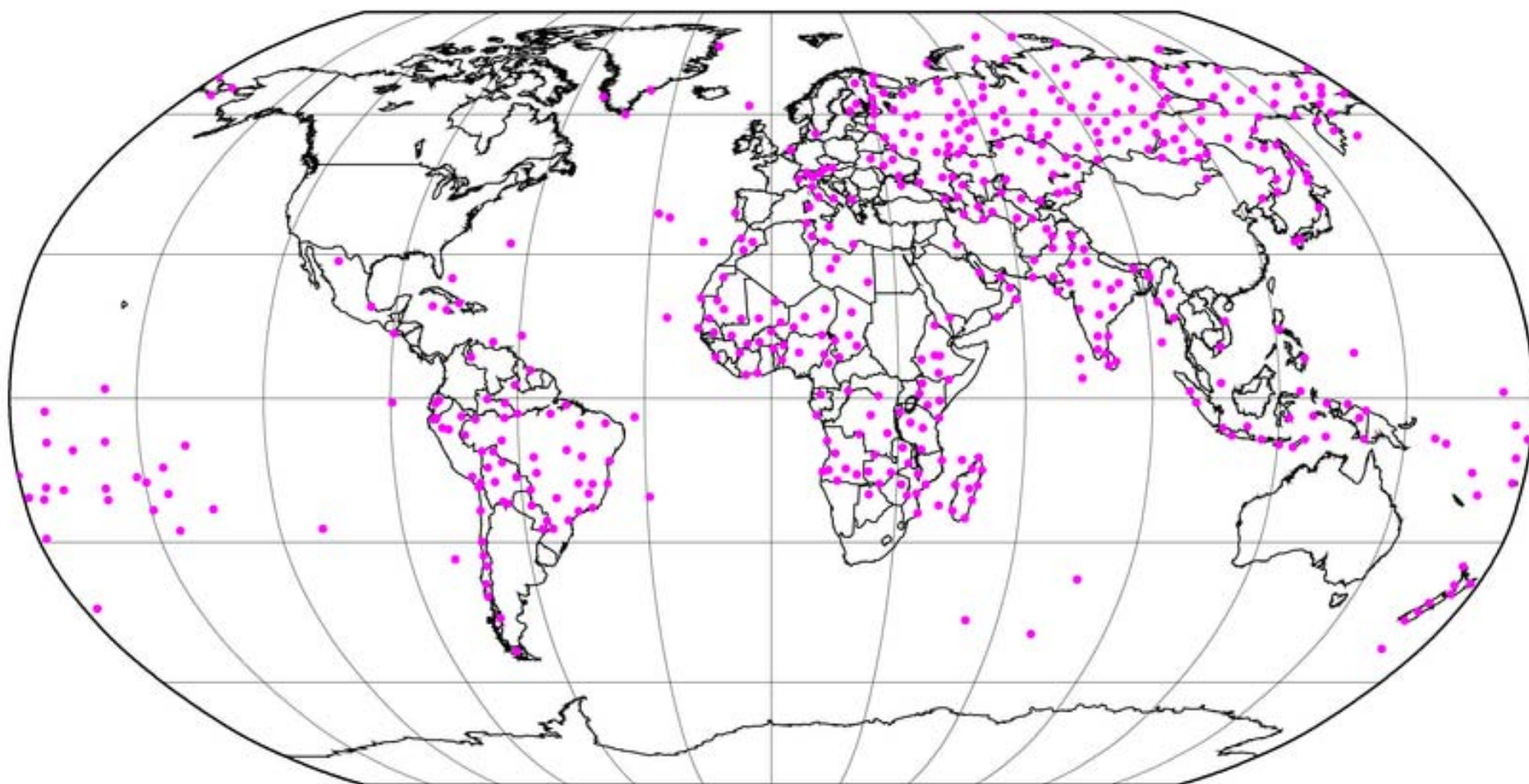
Percent of Estimated Potential Daily Data in the GSN Archive



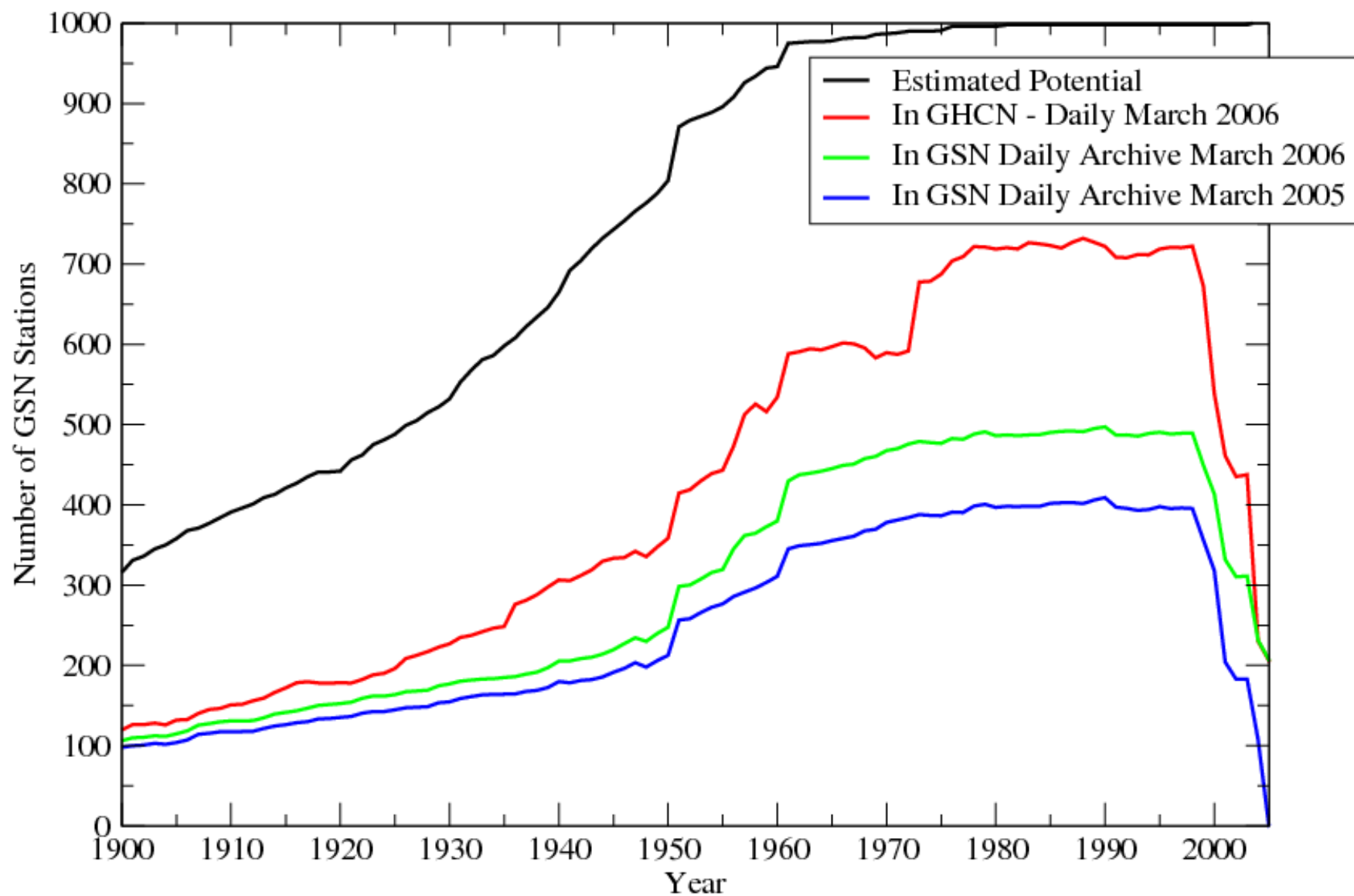
Percent of Potential Daily Data in GHCN Daily



Stations with No Daily Data in the GSN Archive

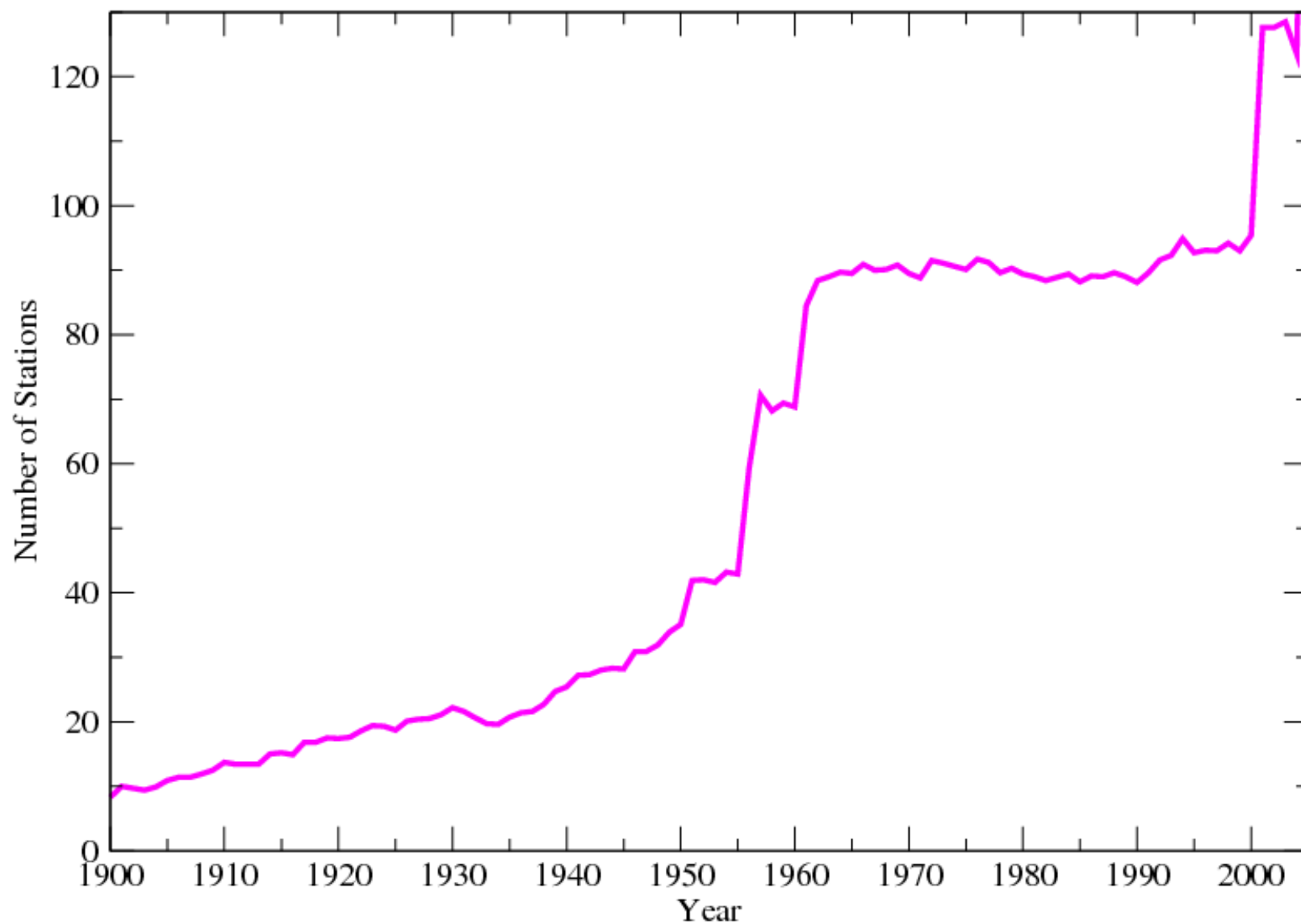


Daily GSN Data



Number of Stations Added to the GSN Data Archive

March 2005 to March 2006



Making GSN Data Available

- New approach coming shortly
 - Unfortunately, promised each of the last few years
- Subset of GHCN-Daily
 - Waiting on new QC and reformatting
 - Ready by end of May (Russ Vose)
- Incorporated in NCDC Customer Service system
 - With in one month of reformatting (Neal Lott)
 - Will be able to download whole GSN or a subset of GSN



Received since this analysis

- Uzbekistan
 - Chimbaj, 38262, 1950-2005
 - Tamdy, 38413, 1950-2005
 - Tashkent, 38457, 1950-2005
- Sri Lanka
 - Nuwara Eliya, 43473, 1869-2004
 - Hambantota, 43497, 1869-2004



GUAN Activities

- Greg Hammer seeking GUAN historical metadata but has had little success this past year
 - Received promises to provide more metadata
 - Greg has asked for an additional contact person in Russia
 - But not the metadata themselves
 - Just received updates to New Zealand metadata March 29th
- Matt and Imke have updated the IGRA metadata database using all the GUAN metadata Greg has collected to date.
 - The records can be obtained from the IGRA web page (<http://www.ncdc.noaa.gov/oa/cab/igra/index.php>)
- Health of the Network now evaluating GUAN





NOAA Satellite and Information Service
National Environmental Satellite, Data, and Information Service (NESDIS)



**National Climatic
Data Center**
U.S. Department of Commerce



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Network Performance Indicators GCOS Upper Air Network

GCOS Upper Air Network Options

[Station Map with Reporting and Graphing Options](#)

Offers the user a selection of graphing, reporting, and mapping options by station and FIPS country.

[GCOS Upper Air Station Listing](#)

GCOS Upper Air Network station listing including links to current inventories and graphs.

[Missing GUAN Stations - 200601](#)

Missing station listing for the indicated month including links to current inventories and graphs.

[Introduction](#)

The introduction provides information about the GCOS Upper Air Network.

[Global Observing Systems Information Center \(GOSIC\)](#)

Provides access to information pertaining to several global observing networks including GUAN.

[Publications and Documentation](#)

Publications and documentation pertaining to the GCOS Upper Air Network are available from this page.

[Additional Links](#)

Links to GCOS Upper Air Network related websites.

[NCDC](#) / [Monitoring](#) / [Health of the Networks](#) / [U.S. In Situ](#) / [GUAN Home](#)

[Privacy Policy](#)

HOW ARE WE DOING?
A user survey

FIRST GOV
The U.S. Government's Official Web Portal

[Disclaimer](#)

<http://www.ncdc.noaa.gov/oa/hofn/guan/guan-home.html>

Created by Helen.Frederick@noaa.gov

Downloaded Thursday, 23-Mar-2006 10:57:29 EST

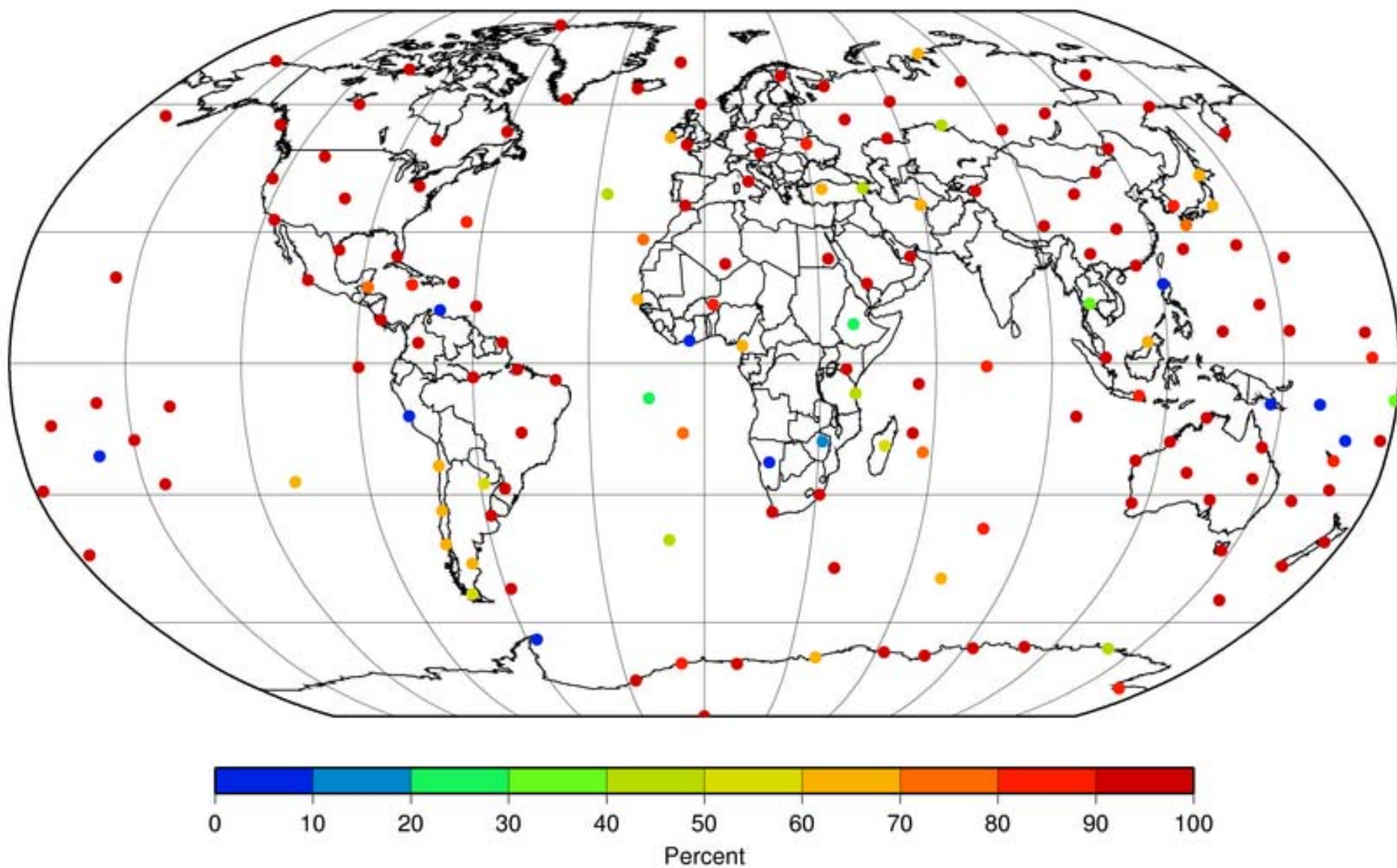
Last Updated: Thursday, 23-Mar-2006 12:42:44 EST

GUAN Minimum Requirements

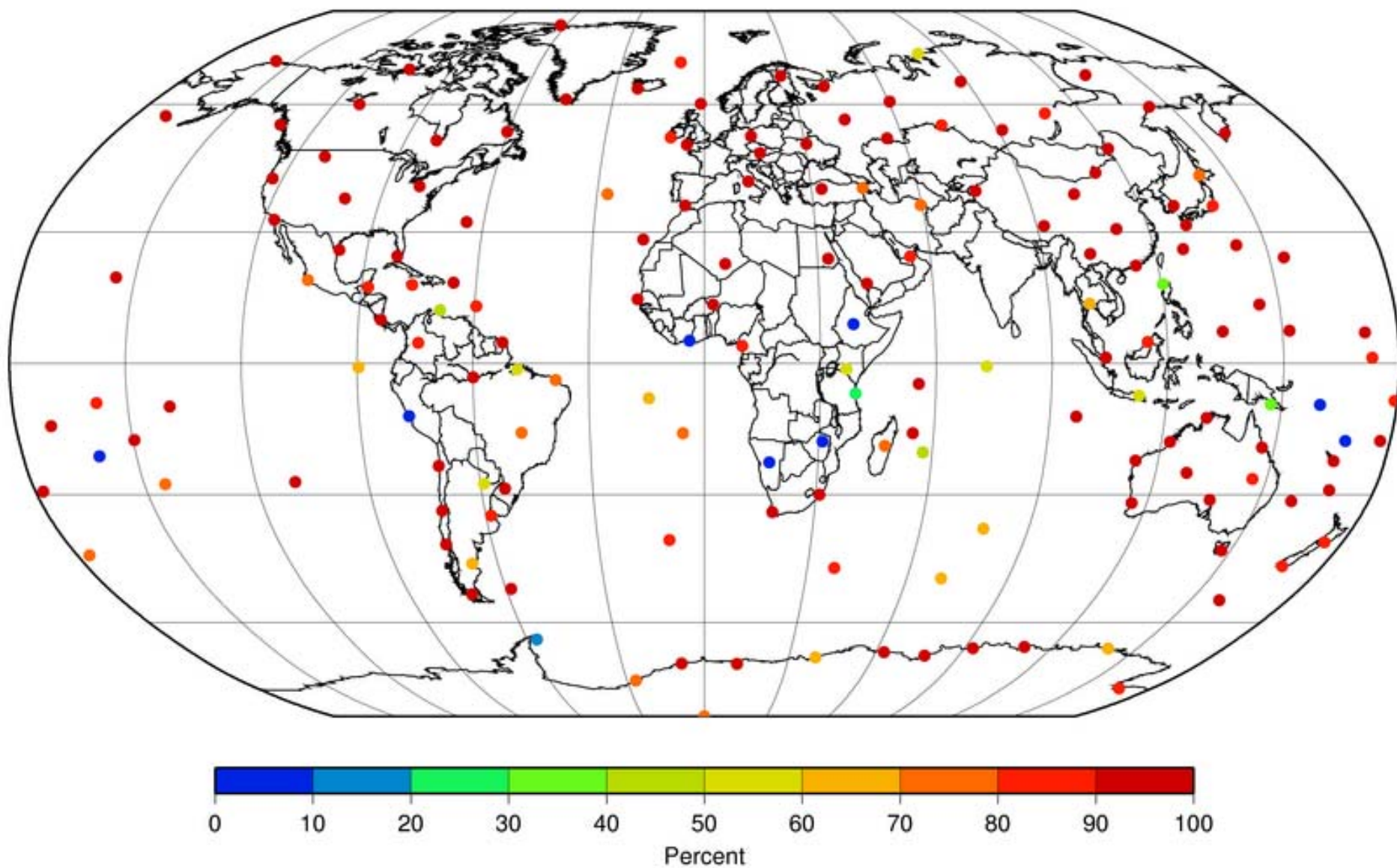
- At least 25 days per month with at least one radiosonde with
 - Temperature up to 100 hPa
 - Humidity up to 300 hPa
 - Wind speed and direction up to 100 hPa



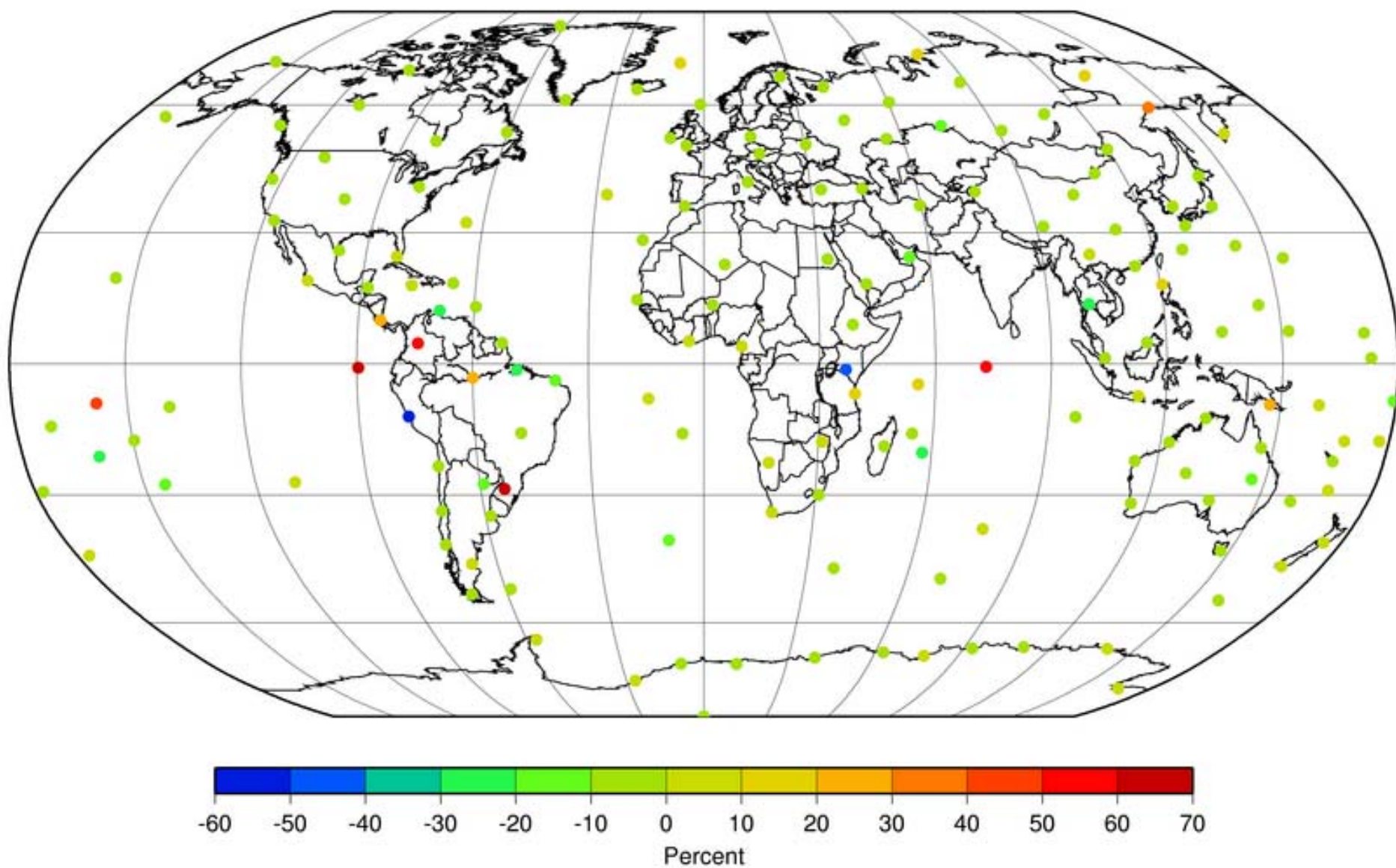
GUAN % Minimum Requirements - February 2006



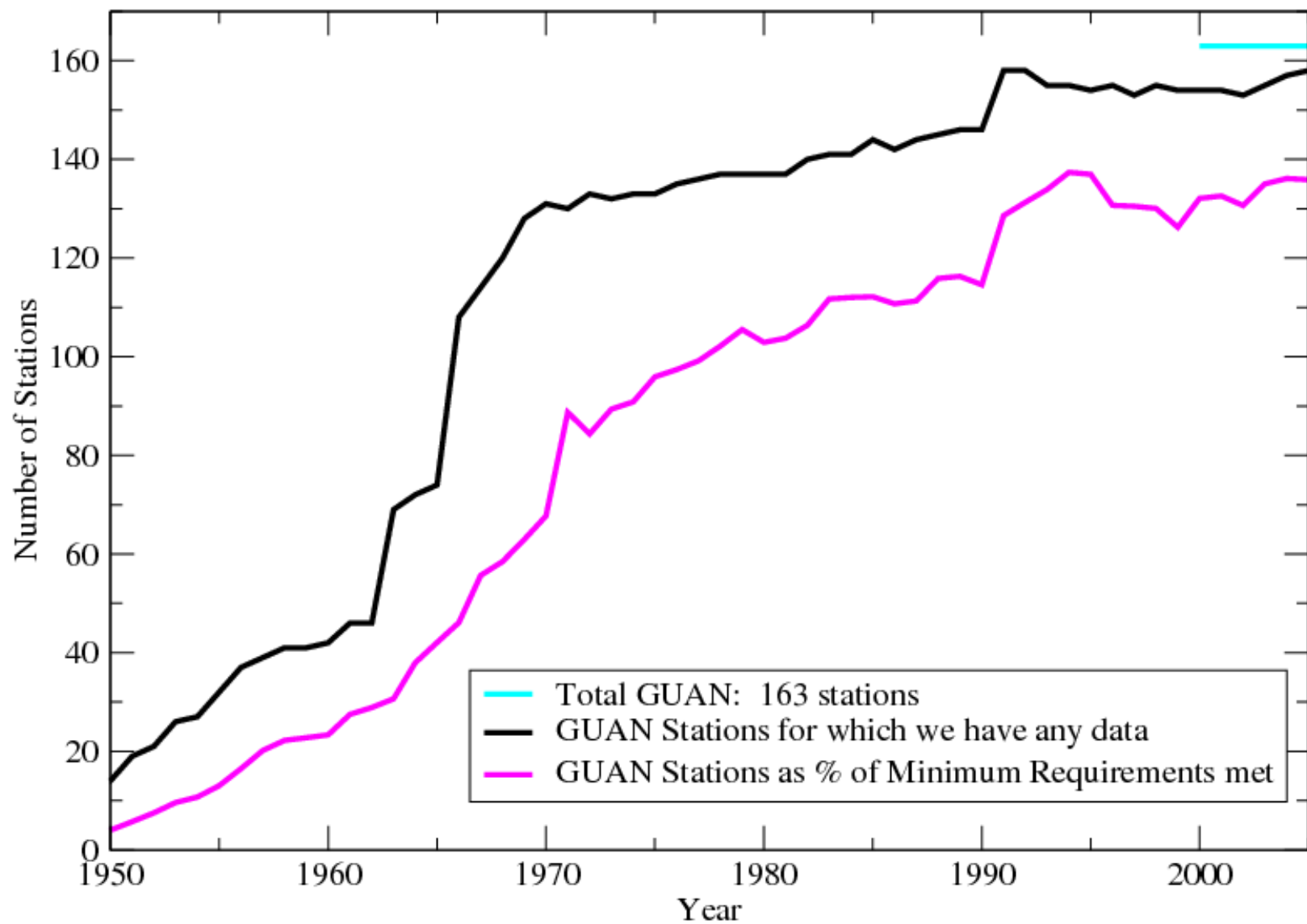
GUAN % Minimum Requirements - March 2005 through February 2006



Change in GUAN % Minimum Requirements Met - Mar 05 to Feb 06 minus Mar 04 to Feb 05



GUAN Performance

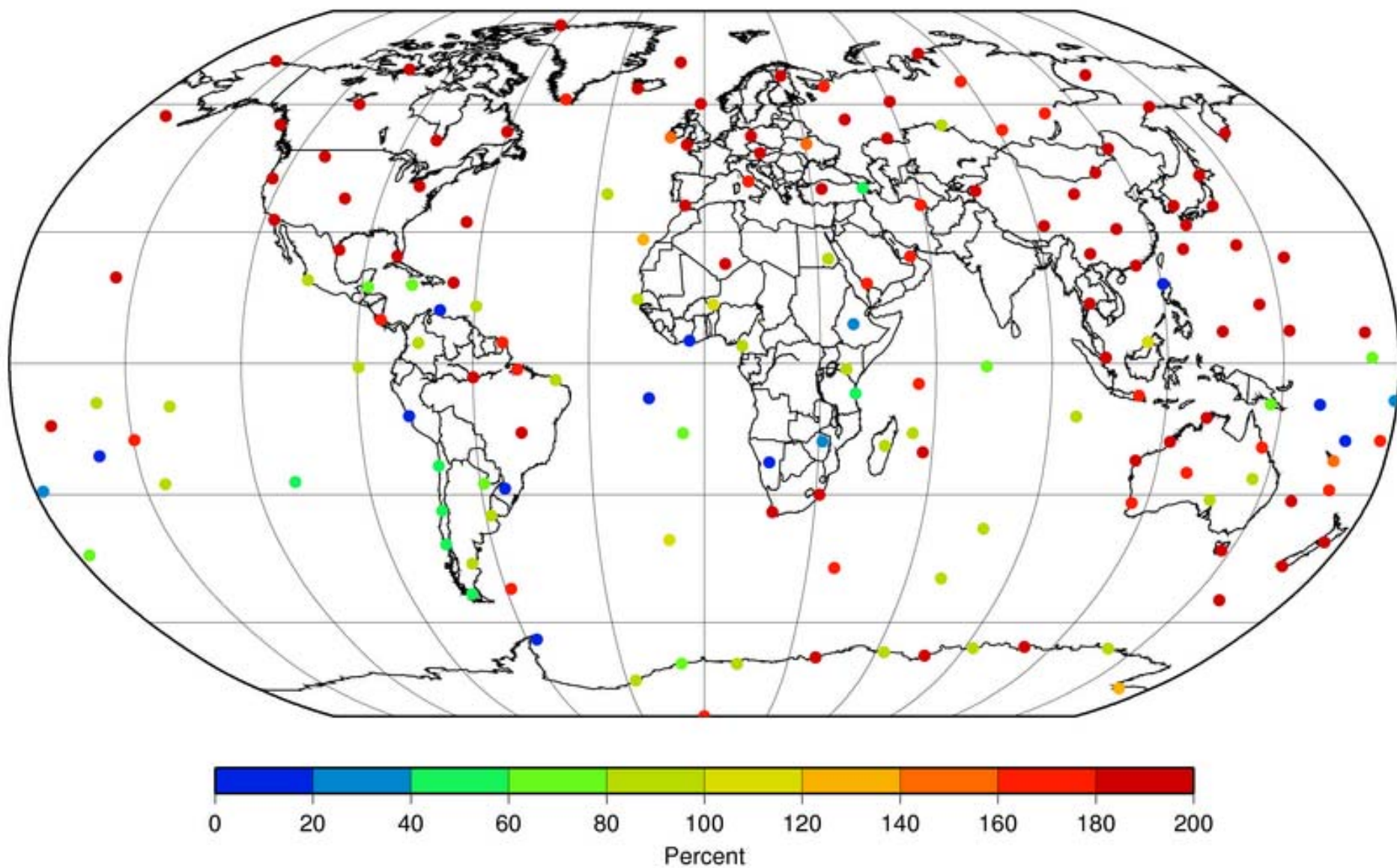


GUAN Target Requirements

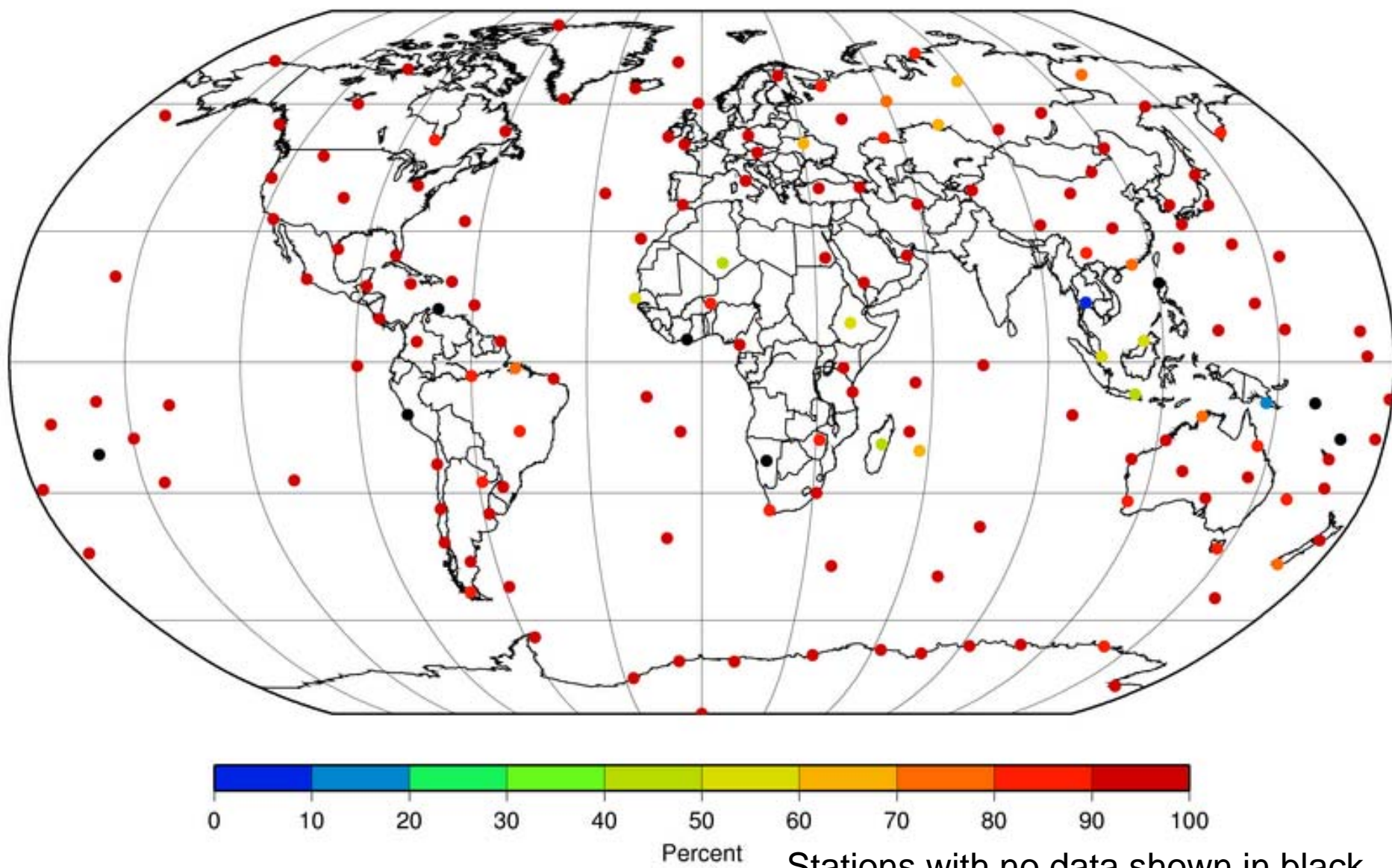
- Twice daily soundings
 - One map of percent of complete once per day sounds for February 2006
 - 200% would equal complete twice per day soundings
- Temperature and winds to 10 mb
 - Four maps of percent of soundings reaching 100, 50, 10, and 5 hPa for February 2006



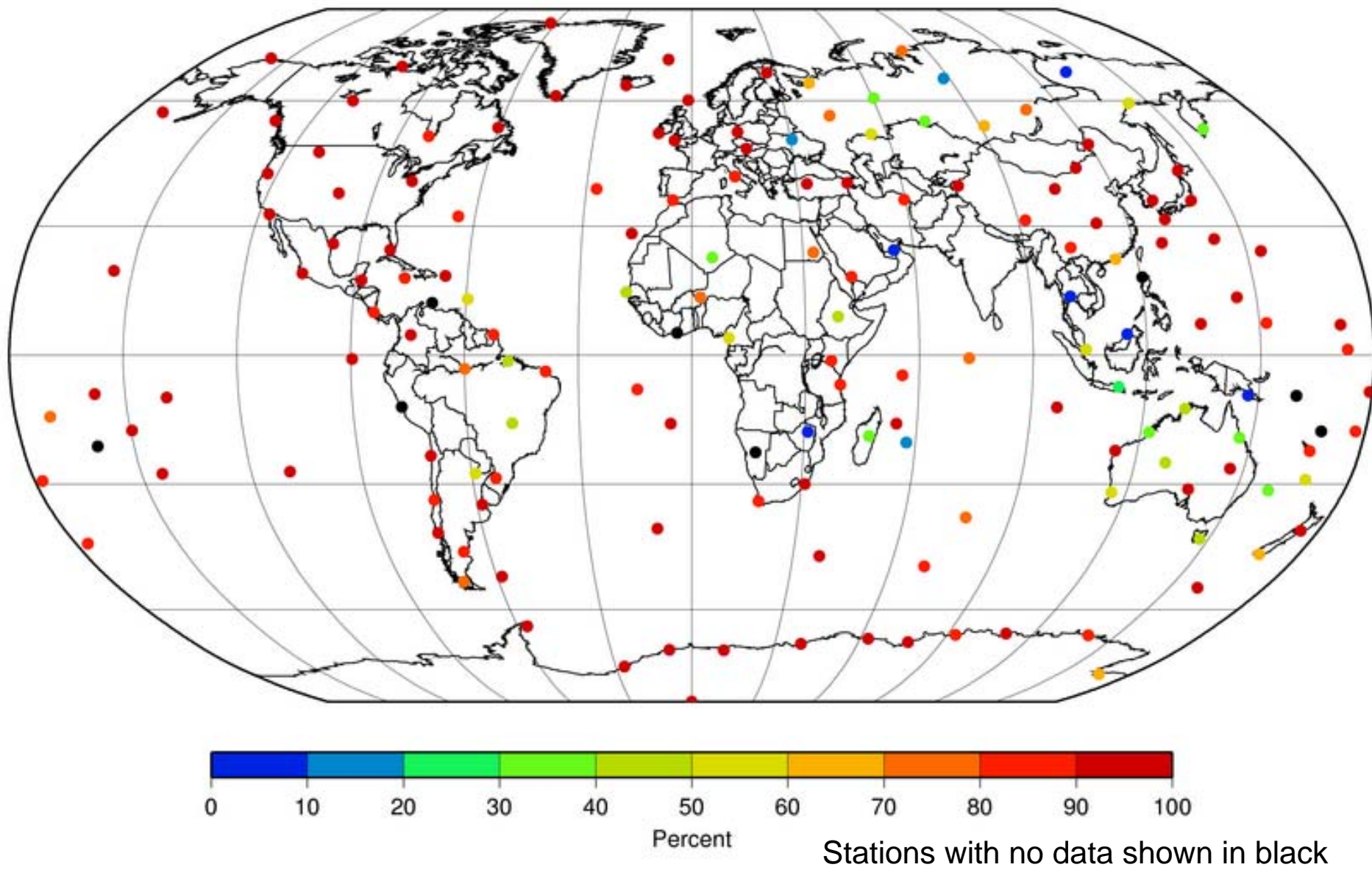
GUAN % of 28 (one per day) Soundings Received - February 2006



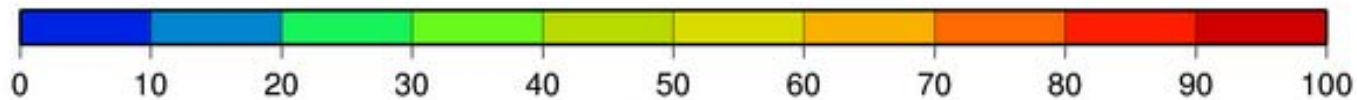
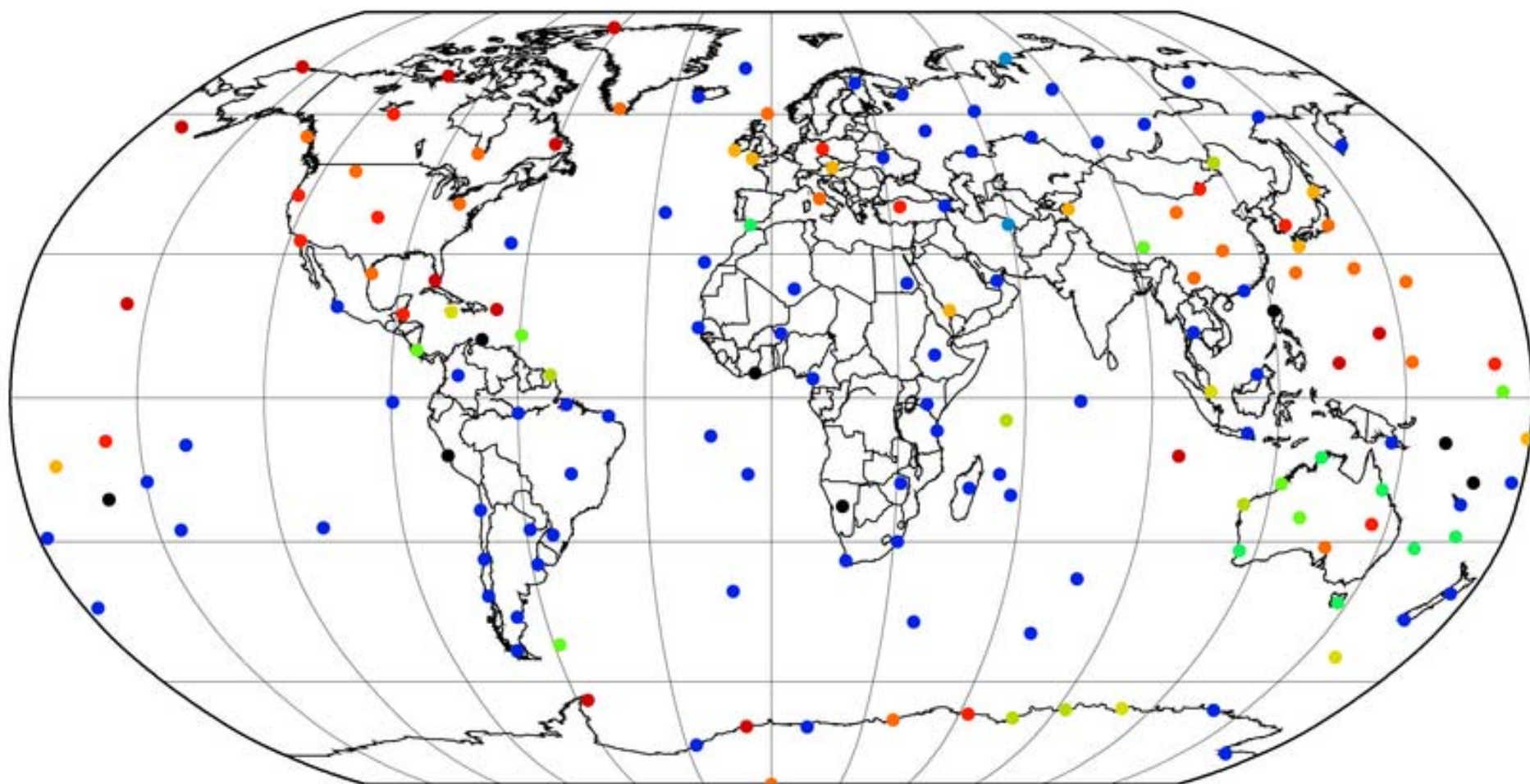
GUAN % of Soundings Reaching 100 hPa - February 2006



GUAN % of Soundings Reaching 50 hPa - February 2006



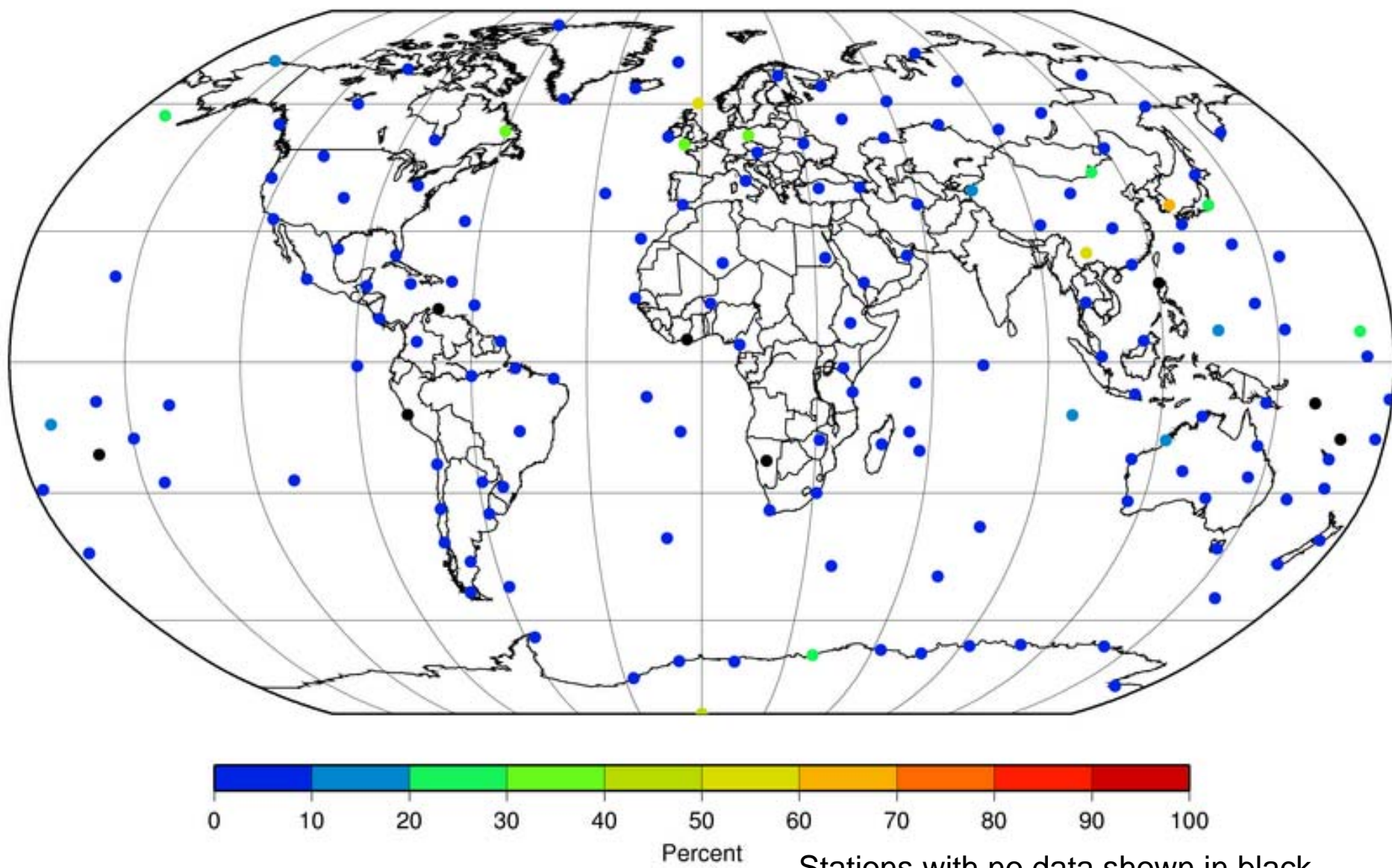
GUAN % of Soundings Reaching 10 hPa - February 2006



Percent

Stations with no data shown in black

GUAN % of Soundings Reaching 5 hPa - February 2006

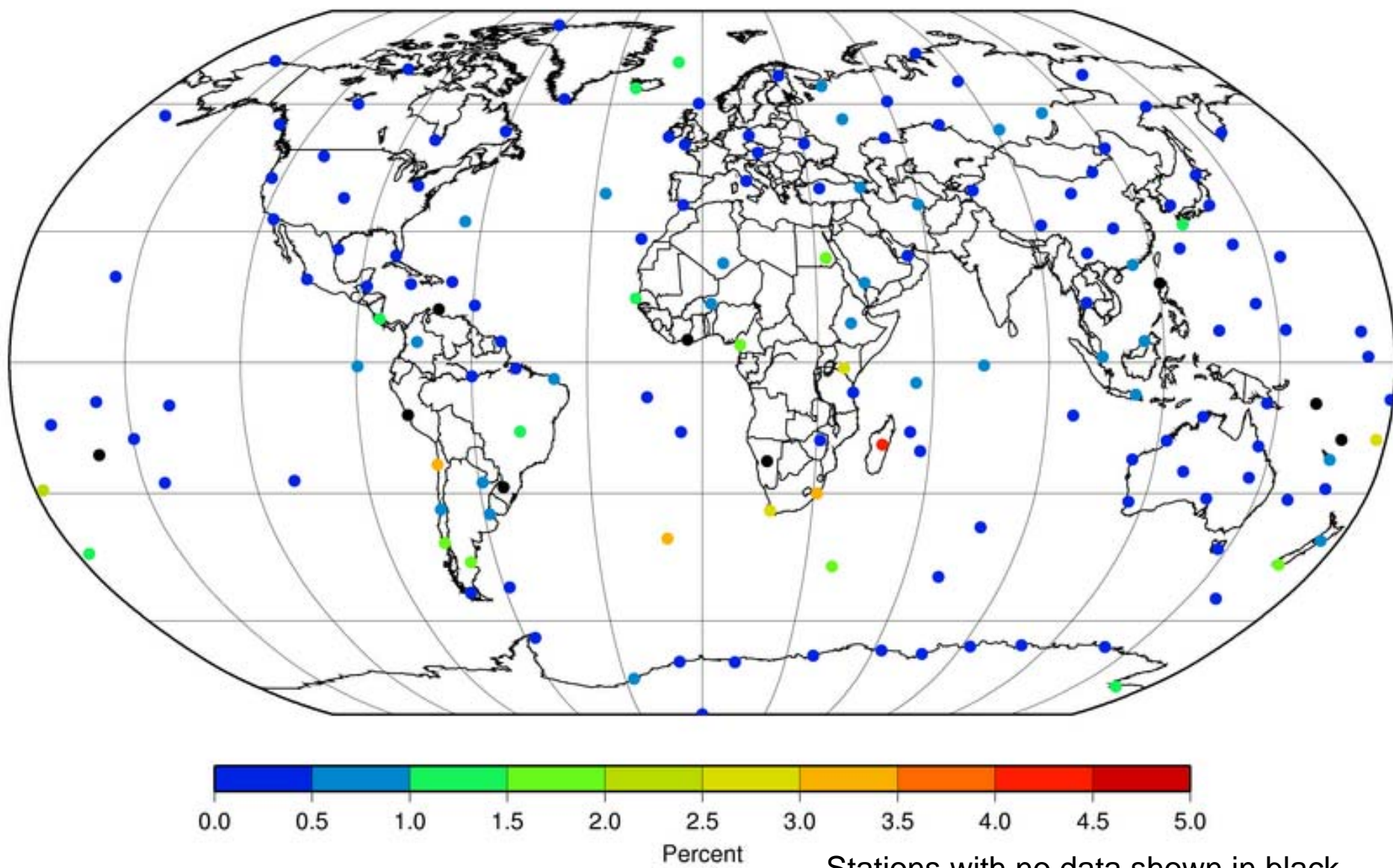


Data Quality

- NCDC's Integrated Global Radiosonde Archive (IGRA) QC
 - Imke Durre & Matt Menne
- % of wind, temperature and humidity data at mandatory levels flagged by QC



GUAN % of Recieved Data Flagged by QC - February 2006



Conclusions

- GUAN
 - Several improvements but a few stations going downhill
 - Little cooperation on metadata
- GSN
 - Increasing daily data in historical archive
 - CLIMAT requests are just starting
- "Perseverance furthers"
 - I Ching

